

# National Transportation Program Key NTP Packaging Projects Status

Packaging Management Council  
Meeting  
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# **Chicago Packaging Workshop Actions**

## **SARP Quality Improvement Option Study**

The purpose of this effort is to develop, evaluate, select and recommend options to improve the quality of SARP submissions to regulators in order to expedite the Type B packaging certification process.

Status: 1st Draft: 07/31, Final Report: 09/28/2001



# **Chicago Packaging Workshop Actions**

## **LLW/MLLW Container Procurement Efficiency and Quality Improvement Study**

The purpose of this effort to investigate opportunities identified in the LLW breakout session of the Chicago Packaging Workshop related to centralized or regionalized procurement of a family of waste containers and standardized QA/QC of suppliers

Status: Data collected. 1st draft : 08/30/2001



## **Other Key Packaging Projects**

### **Double Containment Rule Elimination Study**

The study supported earlier DOE position on the elimination of this rule and determined significant penalties to DOE from the double containment requirements in the areas of TRU wastes, plutonium oxides and residues, and damaged spent nuclear fuel shipments.



## **Other Key Packaging Projects**

### **Double Containment Rule Elimination Study-contd.**

Study estimated these penalties to be more than \$60M for the ten-year period.

Also estimated unnecessary worker radiation exposure during loading and unloading operation in the range of 1300 to 4500 person-rem over ten-year period.

Status: Final Draft-07/15/2001



# Other Key Packaging Projects

## Joint NRC/DOE/IAEA Contamination Research Project

Purpose is to review the model used in determining current surface contamination Limits in regulations. DOE anticipates an impending increase in the number and frequency of transports of spent nuclear fuel and high-level waste as progress to establish a permanent repository for these materials accelerates.

Status: Just started, two years to complete



## **Other Key Packaging Projects**

### **Implementation of “Safe Harbor” Provisions of 10 CFR Part 830 Rule**

Need to assure compliance with 10 CFR 830 Subpart B Safety Basis Requirements for transportation activities of DOE contractors, and DOE personnel, and other persons at DOE nuclear facilities in accordance with the ‘safe harbor’ provisions listed in the ‘Table 2’ of the regulations.

Status: Work-In-Progress



## **Other Key Packaging Projects**

### **Support NRC Package Performance Study**

NTP research ‘Core Capability ‘ at SNL is being leveraged in the NRC sponsored “package Performance’ study. Projects handled under the ‘Package Performance’ study are equally important to DOE as well as to NRC. For example: NTP full supports ‘Full Scale Testing’ project sponsored by the NRC.

Status: Work-In-Progress





# Other Key Packaging Projects

## Sabotage of Type B Packages

There is considerable interest in the international and domestic community in the potential consequences of sabotage events on Type B packages. NTP is addressing questions pertaining to higher energy, armor piercing devices and providing better definition of the spent fuel/surrogate material aerosol ratio. NRC is also a sponsor. Status: WIP



# Other Key Packaging Projects

## Advanced Visualization

This program is a web-based communication outreach tool that will provide stakeholders and public an opportunity to assess various transportation testing results in answering the question: “How safe is safe, in radioactive material transportation and packaging?”

<http://ttd.sandia.gov/transportation/SAFETY.htm>

Status: Phase 1 over, Phase 2: WIP



## **Other Key Packaging Projects** **Packaging Management Strategy**

The DOE will design and implement a corporate approach to packaging management that will coordinate and integrate key packaging activities across departmental programs (EM, NNSA, RW, and NE). The integrated Strategy will also lead to improved interactions with other DOE elements throughout the complex.



# **Packaging Management Strategy**

## **8 Key Elements**

Eight Key Elements:

1. Develop a corporate Transportation Forecast
2. Develop a corporate packaging inventory
3. Develop a corporate packaging needs
4. Identification of packaging technology needs
5. Develop a corporate packaging logistics management system



# **Packaging Management Strategy**

## **8 Key Elements**

Eight Key Elements-contd.

6. Develop a corporate packaging fleet budget baseline

7. Develop a corporate process to ensure excellence in packaging SARP

8. Develop a process for determining priority for package certification

